

WHAT IS CLAIMED:

1. An apparatus for managing device information through networks, comprising:

a first polling list for storing polling information including device Internet Protocol (IP) addresses assigned to home devices, polling intervals, and last polling times;

a poller for checking the first polling list and sending out a second polling list listing first devices of the home devices to be polled; and

a message processor for generating a polling message based on received registration request messages from the home devices, sending out the polling message verifying whether a corresponding device of the first devices is activated with reference to the second polling list, and updating the polling information stored in the first polling list based on a response message with respect to the polling message received from the corresponding device.

2. The apparatus as claimed in claim 1, wherein the message processor further generates device information including at least one of basic information on the home devices, a service list, and a state variable list, based on the registration request messages, and updates the device information based on the response message to the polling message.

3. The apparatus as claimed in claim 2, further comprising:

a database for databasing and storing the device information;

a database processor for performing transactions on the device information stored in the database; and

a page generator for generating and providing to the message processor the device information in a web page format based on the device information received from the database processor in response to information requests on the home devices.

4. The apparatus as claimed in claim 3, wherein the page generator generates the device information in the web page format when there is no need to send out the polling message with respect to the corresponding device in response to the information requests and when the response message of the corresponding device in response to the polling message is normal.

5. The apparatus as claimed in claim 4, wherein, when a difference between a last polling time and an information request time with respect to the corresponding device is smaller than a predetermined time, there is no need to send out the polling message.

6. The apparatus as claimed in claim 3, further comprising a data processor for receiving and providing to the message processor additional information including at least one of location information on the home devices and identification information, wherein the message processor requests the data processor to provide the additional information if the message processor receives the registration request message from the home devices.

7. The apparatus as claimed in claim 3, wherein the message processor multicasts a multicast message requesting the home devices to send out the registration request messages at an initial operation.

8. The apparatus as claimed in claim 3; wherein the message processor, when receiving a connection termination message from one of the home devices, requests the poller and the database processor to delete the polling information and the device information on the one of the home devices.

9. The apparatus as claimed in claim 1, wherein the device information includes device kind information comprising at least one of a device type, a serial number, a manufacturer, and a device IP address assigned to the home devices.

10. A method for managing device information through networks, comprising:

generating polling information including device Internet Protocol (IP) addresses assigned to home devices, polling intervals, and last polling times based on registration request messages received from the home devices;

storing the polling information;

checking a first polling list and sending out a second polling list listing first devices of the home devices to be polled; and

sending out a polling message verifying whether a corresponding device of the first devices is activated with reference to the second polling list,

and updating the polling information stored in the first polling list based on a response message received from the corresponding device with respect to the polling message.

11. The method as claimed in claim 10, further comprising:

generating the device information including at least one of basic information on the home devices, a service list, and a state variable list, based on the registration request messages; and

updating the device information based on the response message to the polling message.

12. The method as claimed in claim 11, further comprising:

databasing and storing the device information;

performing transactions on the device information stored in the database; and

generating and providing the device information in a web page format based on the device information received from the operation of performing the transactions in response to information requests on the home devices.

13. The method as claimed in claim 12, wherein the operation of generating the device information in the web format generates the device information in the web page format, when there is no need to send out the polling message with respect to the corresponding device in response to the

information requests and when the response message of the corresponding device in response to the polling message is normal.

14. The method as claimed in claim 13, wherein, when a difference between a last polling time and an information request time with respect to the corresponding device is smaller than a predetermined time, there is no need to send out the polling message.

15. The method as claimed in claim 12, further comprising:  
receiving and providing additional information including at least one of location information on the home devices and identification information from a user upon registering the home devices; and  
requesting the operation of providing the additional information if the registration request message is received from the home devices.

16. The method as claimed in claim 12, further comprising multicasting a multicast message requesting the home devices to send out the registration request messages at an initial operation.

17. The method as claimed in claim 12, further comprising deleting the polling information and the device information on one of the home devices when receiving a connection termination message from the one of the home devices.

18. The method as claimed in claim 10, wherein the device information comprises device kind information having at least one of a device

type, a serial number, and a manufacturer, and device IP addresses assigned to the home devices.